REMARKS

In an Office Action dated June 16, 2008, the Examiner rejected claim 2 under 35 U.S.C. §112, Second Paragraph, as being indefinite; rejected claims 1-10 and 18-22 under 35 U.S.C. §112, First Paragraph, as failing to comply with the written description requirement; rejected claims 18-22 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al.; rejected claims 1-6, 9, 10, and 18-22 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of Sweetland; rejected claims 7 and 8 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of Sweetland as applied to claim 1 above, and further in view of Bruce. These rejections are respectfully traversed. Claims 1-10 and 18-22 are pending in this application. Applicants have carefully reviewed the Examiner's rejections and comments as found in the Office Action dated June 16, 2008 and provide the following remarks regarding the Office Action.

Claim Rejection – 35 U.S.C. §112, Second Paragraph

The Examiner rejected claim 2 under 35 U.S.C. §112, Second Paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 has been canceled. Thus, it is believed that this rejection is overcome.

Claim Rejection – 35 U.S.C. §112, First Paragraph

The Examiner rejected claims 1-10 and 18-22 under 35 U.S.C. §112, First Paragraph, as failing to comply with the written description requirement. Applicant has amended claims 1, 3, 18, and 20 to clarify the rib limitation of these claims. Thus, it is believed that this rejection is overcome.

Claim Rejection – 35 USC §103(a)

The Examiner rejected claims 18-22 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. For a *prima facie* case of obviousness to be established, the following factual inquiries as enunciated in *Graham* must be determined: (A) determining the scope and contents of the prior art; (B) ascertaining the differences between the prior art and the claims at issue; (C) determining the level of skill in the pertinent art; and (D) evaluating any evidence of secondary considerations. Further, in *KSR*, a number of rationales for supporting a conclusion of obviousness consistent with the "functional approach" in *Graham* were laid out. Additionally, it is key that the Examiner articulate their reason why the claimed invention would have been obvious. (MPEP 2143) Applicant respectfully submits that the Abbenhouse reference neither forms the basis of nor establishes a *prima facie* case of obviousness.

In light of the presently amended claims, Abbenhouse et al. does not teach three ribs that extend distally from the longitudinal centerline of a single-piece skeleton towards the outer

periphery of the paddle blade. Further, Abbenhouse et al. does not teach a paddle blade that has a single-piece skeleton and an injection molded outer surface that encloses and directly contacts the single-piece skeleton. Additionally, the Abbenhouse reference discloses two branches 43 and 44 that "diverge out toward the blade tip 39, but terminate short of the blade tip 30." (Col. 3, Lns. 18 - 20) As can be seen from Figures 1A and 1B of the Abbenhouse reference, the branches do not extend distally from the longitudinal centerline of its body towards the outer periphery of the paddle blade where they end substantially at the outer periphery of the paddle blade. Thus, these branches do not provide the same magnitude of lateral and longitudinal support to the blade tip and outer tips of the blade as the skeleton and ribs of the present application.

Moreover, the Abbenhouse reference uses an internal foam section to create an outer surface shape during molding. This outer shape is what increases the strength of the final part. Additionally, the internal foam section of the Abbenhouse reference does not carry any load, but rather allows the forming of a cross sectional shape that once molded from composite carries the load placed on the blade during paddling more efficiently than a flatter profile. The central foam component in the Abbenhouse reference is NOT load bearing and provides no increase in strength beyond that of allowing a unique shape to be molded in the outer skin.

Conversely, the present invention provides both the internal and external components that are load bearing. The internal structural skeletal ribs are designed to be a load bearing component that not only provides a unique cross-sectional profile, but also adds to the blades ability to carry loads beyond those provided only by modifying the outer shape of the component. The present invention's internal ribs are also designed in a way that allows it to be "tuned" in a matter that transmits energy from the outer skin back into the paddle shaft, thus increasing the load bearing capability of both the outer and inner components.

Claim 18 has been presently amended and previously amended to clarify that the blade has a skeleton that has three ribs that extend distally from the longitudinal centerline of a single-piece skeleton and that the outer surface is injection molded enclosing the single-piece skeleton. Thus, Abbenhouse et al. does not teach these limitations as disclosed and claimed in the present application.

For the reasons stated above with respect to the Abbenhouse reference, and in light of amended independent claim 18, Applicant respectfully submits that this reference does not form the basis of a *prima facie* case of obviousness of independent claim 18. Therefore, it is believed that claim 18 is allowable under 35 U.S.C. §103(a). Claims 20-22 depend from and include all the limitations of amended claim 18, thus they are also believed to be allowable under 35 U.S.C. §103(a).

Claim Rejection – 35 USC §103(a)

The Examiner rejected claims 1-6, 9, 10, and 18-22 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of Sweetland. Applicant respectfully submits that the Abbenhouse reference in view of Sweetland neither forms the basis of nor establishes a *prima facie* case of obviousness.

Regarding the Abbenhouse reference, the above arguments continue to apply. Regarding the Sweetland reference, it does not teach a blade with a single-piece skeleton that has at least three ribs that extend distally from the longitudinal centerline of the skeleton to the outer periphery of the blade to reinforce the blade both longitudinally and laterally nor the above amended limitations. Therefore, the combination of Abbenhouse et al. and the Sweetland do not teach each and every claim element as found in the amended independent claims 1 and 18.

Moreover, the Sweetland reference teaches various independent interlocks that are specifically designed to resist movement in one plane only. The pins used to hold the grips in place (Figs. 1-4) resist movement in a rotational plane around the center axis of the shaft that the grip is wrapped around. The ridge used to hold the grip in place (element 24 of Fig. 3 and element 67 of Fig. 7) resists movement in the long axis plane lengthwise along the shaft to which the grip is mated. This combination of elements only functions properly if both items are used in combination with one another. If the pins are removed, the grip is free to rotate in one direction while if the ridges are removed, the grip is free to rotate in another direction.

Conversely, as argued before, the present invention discloses and claims a unique method of grip interlock that utilizes a single mating surface that incorporates a lock for all axis of available movement. By using a single multi-faceted surface to interlock the gripping member, the present invention resists movement in all planes without the use of pins or ridges. By eliminating the use of pins and/or ridges in the underlying structure, the present invention is able to produce a final component that is both stronger and lighter than the design taught in Sweetland. This increased strength comes from the ability to design a mating surface that is free of hard edges.

For the reasons stated above with respect to the Abbenhouse reference in view of the Sweetland reference, and in light of amended independent claims 1 and 18, Applicant respectfully submits that these two references do not form the basis of a *prima facie* case of obviousness of independent claims 1 and 18. Therefore, it is believed that claims 1 and 18 are allowable under 35 U.S.C. §103(a). Claims 3-6, 9, 10, and 20-22 depend from and include all the limitations of amended claims 1 and 18, respectively, thus they are also believed to be allowable under 35 U.S.C. §103(a).

Claim Rejection – 35 USC §103(a)

The Examiner rejected claims 7 and 8 under 35 U.S.C. §103(a) as being unpatentable over Abbenhouse et al. in view of Sweetland as applied to claim 1 above, and further in view of Bruce. Applicant respectfully submits that the Abbenhouse reference in view of the Sweetland as applied to claim 1 above, and further in view of Bruce neither forms the basis of nor establishes a *prima facie* case of obviousness.

In addition to the arguments presented herein regarding Abbenhouse et al. and Sweetland, Bruce is a design patent that teaches an ornamental design for a paddle that includes a bent shaft but little else. In addition, Bruce teaches that the offset portion of the shaft incorporates two bends to the shaft at positions internal and external of the gripping section. This places the center axis of the blade behind the users hand during use. By this arrangement, an amount of torque induced twisting is created due to the fact that the axis of the blade does not meet the center line of the gripping section of the grip. Conversely, the present application discloses and claims in claim 7 an ergonomic shaft and grip design that aligns the center axis of the blade with the center section of the gripping section. This is accomplished in claim 7 by having a shaft that incorporates three bends to allow for the center line of the blade to line up directly with the center point of the gripping section. These three bends are disclosed and found in claim 7, particularly, "*...wherein the shaft is bent such that (1) a centerline of a first portion of the shaft is offset from a centerline of a second portion of the shaft by at least one of (i) more than 10 degrees and (ii) less than 17 degrees, and (2) a centerline of a third portion of the shaft bisect the center portion of the first portion of the shaft.*" These three bends provide that the center line of the blade lines up directly with the center point of the grip, thus decreasing the amount of torque induced twisting common in the design taught by Bruce.

For the reasons stated above with respect to the Abbenhouse reference in view of the Sweetland reference, and further in view of Bruce, and in light of amended independent claim 1 Applicant respectfully submits that these references do not form the basis of a *prima facie* case of obviousness of independent claim 1. Therefore, it is believed that claim 1 is allowable under 35 U.S.C. §103(a). Claims 7-8 depend from and include all the limitations of amended claim 1, thus they are also believed to be allowable under 35 U.S.C. §103(a).

In view of the above amendments and remarks, Applicant believes the pending application is in condition for allowance. A thee-month extension is due with this response and proper extension fees are submitted herewith. If an additional fee is due, please charge our Deposit Account No. 50-2816, under Order No. 022306.0101PTUS from which the undersigned is authorized to draw.

Respectfully submitted,
PATTON BOGGS LLP

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